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09/599,735	06/23/2000	Noaki Watanabe	501.38590X00	1503

			EXAMINER
20457	7590	01/14/2004	LIANG, GWEN

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ART UNIT	PAPER NUMBER
2172	18

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Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
> THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
>   after SIX (6) MONTHS from the mailing date of this communication.
> - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
> - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
>   earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>10 November 2003</u>.

2a) ☒ This action is **FINAL**.　　　　2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-11, 14-18 and 20</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-11, 14-18 and 20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

　　a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) ☐ Other: .

DETAILED ACTION

1.   This action is responsive to communications: Amendment D, filed on 11/10/2003.

Claims 1-11, 14-18 and 20 are pending.

Claim Objections

2.   Claims 1-10, 15-18, 20 are objected to because of the following informalities:

In claim 1, the claim language "to the request execution" in line 18 is an improper

use of language.

In claim 1, the claim language "wherein said control unit receives a function

execution request, which is sent from ..., from the server computer ..." in lines 17-22

needs to be changed to clearly show the claimed subject matter. The examiner

suggests that the clause "which is sent from the client computer to the server computer

to ... request execution of one of the function programs" be moved to a separate

"wherein" clause, appended to the end of this limitation.

In claim 1, the claim language "to the data stored in said disk storage media"

seems to be duplicated in lines 24-25 and 26-27. The examiner suggests that the

applicant remove the second occurrence of the claim language at issue.

In claim 15, the claim language "wherein the server computer manages ... steps

of" in lines 4-6 is a part of the preamble and should not be placed into a paragraph

separate from the first part of the preamble.

In claim 20, the claim language "client server" in line 1 should be changed to

"client/server" to conform with the format of the terminology well known to one having

ordinary skill in the art.

In claim 20, the claim language "requests ... to said server computer" in lines 5-6

is improper use of language.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.   Claims 1-10, 14, 15-18, 20 are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

Claim 1 recites the limitation "function programs" in line 7. It is unclear to the

examiner whether "function programs" here refers to the same function programs as in

"a plurality of function programs" cited in line 3 or another type of function programs.

Claim 1 recites the limitation "executes the selected function program in condition

described into the selected function information" in lines 21-22. It is unclear to the

examiner what "in condition described into the selected function information" means.

The applicant is requested to provide the section in the specification to support this

claim limitation or amend the claim language to clearly describe the claimed subject

matter.

Claim 14 recites the limitation "via a network" in line 6. It is unclear to the examiner whether "a network" here refers to the same network as in "via a network" cited in line 2 or another network.

Claim 14 recites the limitation "said storage media" in line 10 of the claim. There is insufficient antecedent basis for this limitation in the claim. The limitation "said storage media " is not exactly found in any of the preceding features in the claim.

Claim 14 recites the limitation "the access" in line 14 of the claim. There is insufficient antecedent basis for this limitation in the claim. The limitation "the access " is not exactly found in any of the preceding features in the claim.

Claim 15 recites the limitation "the access" in line 13 of the claim. There is insufficient antecedent basis for this limitation in the claim. The limitation "the access " is not exactly found in any of the preceding features in the claim.

Claim 20 recites the limitation "the function program that has been requested to be executed from said client computer" in lines 7-8. It is unclear to the examiner whether the applicant means to claim "the function program that has been requested from said client computer" or "the function program to be executed from said client computer".

Allowable Subject Matter

5.   As allowable subject matter has been indicated, applicant's reply must either

comply with all formal requirements or specifically traverse each requirement not

complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

6.   Claims 1-10, 15-18 and 20 would be allowable if rewritten or amended to

overcome the objections of minor informalities and the rejection(s) under 35 U.S.C. 112,

second paragraph, set forth in this Office action.

The following is an examiner's statement of reasons for allowance:

In independent claim 1, the limitation of "a control unit ... wherein said control

unit receives one of the function programs from the server computer and stores the

received function program into the memory, wherein said control unit receives a function

execution request ... from the server computer, selects the requested function program

from the memory, selects the function information in connection with the selected

function program, and executes the selected function program ... and wherein said

control unit examines, based on the selected function information whether an access

from external of said disk unit to the data stored in said disk storage media is allowable

and restricts accesses to the data stored in the disk storage media ... during execution

of the: selected function program.", taken with the other limitations of the claim, were not

disclosed by, would not have been obvious over, nor otherwise fairly disclosed by the

prior art of record.

In independent claim 15, the limitation of "receiving, in a disk unit, a function program and function information relating to execution of the function program from the server; executing, in said disk unit, the function program in response to a function execution request from the client computer as per the function information; and examining, in said disk unit, based on the function information, accesses from external of said disk unit to the data stored in said disk storage media and restricting the access during execution of the function", taken with the other limitations of the claim, were not disclosed by, would not have been obvious over, nor otherwise fairly disclosed by the prior art of record.

In independent claim 20, the limitation of "A client/server system wherein a client computer sends a request to the server for executing a function program, wherein said server computer creates function information relating to execution of the function program ... and wherein a disk unit receives the function program and the function information from the server computer, executes the function program as per the function information and examines, based on the function information, accesses from external of said disk unit to the data stored in said disk storage media and restricts the accesses during execution of the function program", taken with the other limitations of the claim, were not disclosed by, would not have been obvious over, nor otherwise fairly disclosed by the prior art of record.

Response to Arguments

7.   Applicant's arguments regarding Claim 14 is moot based on the new grounds of

rejection.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9.   Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Lei et al.,

"Lei" (U.S. Patent No. 6,487,552).

With respect to claim 14, Lei discloses a disk unit comprising:

disk storage media to store data (See for example: col. 5 lines 24-26, "A storage

device 110, such as a magnetic disk or optical disk, is provided and coupled to bus 102

for storing information and instructions."; Fig. 1 element 110 "STORAGE DEVICE"); and

a control unit (See for example: Fig. 2, wherein the contents and process control

indicated in the "SERVER SIDE" box illustrates a control unit),

wherein said control unit receives function execution requests and user ID

information from a client unit via a network to request execution of one of a plurality of

function programs, selects the requested function program (See for example: col. 8

lines 46-56, "Examples of information that, taken collectively, makes up the context of a

query include: the session_id of the session in which a query is received the user_id of

the user that initiated the session the type of access required by the query (insert,

update, select, delete) the type of application used to issue the query the IP address

identified in the message containing the query the session environment (including the

actual date/time, enabled roles, etc.)", wherein the query = insert, update, select delete

received from the user is equivalent to function execution requests received from a

client. The IP address used in identifying the message makes it obvious that the

request is received via a network.), and

wherein said control unit, based on said user ID information, creates function

information to examine accesses from external of said disk unit to an access area for

data stored in said storage media at each function execution request, selects the

function information in connection with the selected function program, executes the

selected function program as per the selected function information and examines

accesses from external of said disk unit to the access area based on said function

information, and restricts the access (See for .example, col. 14 lines 27-43, 'For

example, assume that the access policy of table t is that everyone is allowed to see all

of the records in their own department, but can only modify the records that apply to

themselves. Further, assume that access to table t is only allowed on weekdays

(Monday-Friday), unless the access is performed by a database administrator. The

logic used by the policy function that implements this policy could be: if

GetContextValue(access_type)=modify then

add_predicate("t.user_id=GetContextValue(user_id)") else

add_predicate("t.dept_no=GetContextValue(dept_id); if

((GetContextValue(today)=Saturday) or (GetContextValue(today)=Sunday)) and

(GetContextValue(user_type)<>dba) then add_predicate"1=2")').

10.   Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Wiederhold

(U.S. Patent No. 6,226,745).

      With respect to claim 14, Wiederhold discloses a disk unit comprising:

      disk storage media to store data (See for example: Fig. 2 "Medical Database");

and

      a control unit (See for example: Abstract "A security mediator system is used in a

computer system having a database of information to be shared with authorized users

in accordance with pre-defined constraints."; Fig. 2 "Security mediator", which is

equivalent to a control unit),

wherein said control unit receives function execution requests and user ID information

from a client unit via a network to request execution of one of a plurality of function

programs, selects the requested function program (See for example: Abstract, "The

rules database includes data for specifying, for each of a plurality of specified groups of

users, which of the rules in the rules database are applicable to queries received from

users in each of the groups. A query pre-processing module applies to each received

query all pre-processing rules in the rules database applicable to the query in

accordance with the identified user who submitted the query. ... A database access

module executing each enabled query to produce a corresponding result."; col. 9 lines

12-15, "In other words, if users can issue project-select-join queries, then they can

perform project, select, and join operations on a sequence of answers."), and

wherein said control unit, based on said user ID information, creates function

information to examine accesses from external of said disk unit to an access area for

data stored in said storage media at each function execution request, selects the

function information in connection with the selected function program, executes the

selected function program as per the selected function information and examines

accesses from external of said disk unit to the access area based on said function

information, and restricts the access (See for example: Abstract, "The rules database

includes data for specifying, for each of a plurality of specified groups of users, which of

the rules in the rules database are applicable to queries received from users in each of

the groups. A query pre-processing module applies to each received query all pre-

processing rules in the rules database applicable to the query in accordance with the

identified user who submitted the query. If any applicable rule is not passed, the query

is blocked; otherwise execution of the query is enabled. A database access module

executing each enabled query to produce a corresponding result.").

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

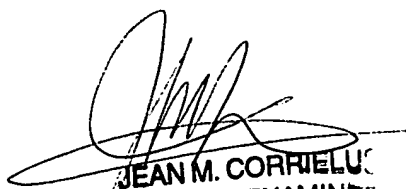than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to GWEN LIANG whose telephone number is 703-305-

3985. The examiner can normally be reached on 9:00 A.M. - 5:30 P.M. Monday and

Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, JOHN BREENE can be reached on (703) 305-9790. The fax phone

number for the organization where this application or proceeding is assigned is (703)

872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

G.L.
5 January 2004

JEAN M. CORBIELU:
/PRIMARY EXAMINER